

Name: \_\_\_\_\_

**Objective 1.01a**  
**The Laws of Exponents**

Describe or give an example of each of the 7 Laws of Exponents.

Negative Exponent	Zero as an Exponent	Multiplying with the Same Base
Dividing with the Same Base	Raising a Power to a Power	Raising a Product to a Power
Raising a Quotient to a Power		

Match each expression with its equivalent expression.

1.  $x^2 \cdot y^5 \cdot 8x^5 \cdot y^{-2}$

A.  $\frac{4}{x^2 y^2}$

2.  $x^{-5} y$

B.  $2y^4$

3.  $\frac{x^3 y^4 x^{-3}}{x^0}$

C.  $8x^7 y^3$

4.  $(2xy^2)^3$

D.  $8x^7 y^2$

5.  $\frac{14x^{12} y^7}{7x^{12} y^3}$

E.  $8x^3 y^3$

6.  $2x^5 (2xy)^2$

F.  $\frac{y}{x^5}$

7.  $\left(\frac{2x^3 y}{x^4 y^2}\right)^2$

G.  $y^4$